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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,749	08/01/2003	Hiroyuki Azuma	NEC 03P101	4659

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HAYES, SOLOWAY P.C.
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TUCSON, AZ 85718

EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/632,749

Applicant(s)

AZUMA, HIROYUKI

Examiner

Philip J. Sobutka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al (US 5,404,580) in view of Rimpela et al (US 6,697,604).

Consider claim 1, Simpson et al. disclose an external module (smart card) for installation into a mobile communication terminal (Abstract, column 4 lines 49-52), said external module comprising;

a collection mechanism (keypad interface) for communicating with said mobile communication terminal to collect information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et

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al. disclose customizing the operation (information relating to the internal state) of the mobile to his personal preference and storing the customizing data, hence the data is collected); and

a storage mechanism for storing therein information that has been collected by said collection mechanism (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claim 8, Simpson et al. disclose a mobile communication terminal in which an external module is installed (Abstract, column 4 lines 49-52), said mobile communication terminal comprising:

an acquisition mechanism (keypad) for acquiring information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating

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to the internal state) of the mobile to his personal preference and storing the customizing data, hence the data is acquired by the mobile terminal); and

an output mechanism (keypad interface and microprocessor) for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122).

Consider claim 9, Simpson et al. disclose a mobile communication system comprising:

a mobile communication terminal (Abstract); and

an external module for installation into said mobile communication terminal (Abstract, column 4 lines 49-52);

wherein said mobile communication terminal comprises:

an acquisition mechanism (keypad) for acquiring information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state) of the mobile to his personal preference and storing the customizing data, hence the data is acquired by the mobile terminal);

an output mechanism (keypad interface and microprocessor) for supplying information that has been acquired by said acquisition means to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

and wherein said external module comprises:

a collection mechanism for collecting information that has been supplied by said output mechanism of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

a storage mechanism for storing therein information that has been collected by said collection means (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claim 10, Simpson et al. disclose a method for testing communication protocol in a mobile communication terminal (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4), an external module being installed into said mobile communication terminal (Abstract, column 4 lines 49-52), said method comprising steps of:

requesting said mobile communication terminal, by said external module, to execute a communication protocol sequence (Column 4 lines 53-56, where Simpson et al. describe a registration request);

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executing, by said mobile communication terminal, said communication protocol sequence in accordance with said request by said external module (Column 4 lines 56-57, where Simpson et al. disclose a registered subscriber);

acquiring, by said mobile communication terminal (keypad), information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2);

supplying, by said mobile communication terminal (microprocessor), the acquired information to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

collecting, by said external module, information that has been supplied by said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

storing, in said external module, the collected information (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claims 2, 3 and 11, Simpson et al in view of Rimpela disclose all the limitations as applied to claims 1 and 10 above and also disclose protocol execution mechanism for requesting said mobile communication terminal to execute a communication protocol sequence (Column 4 lines 53-56, where Simpson et al. describe a registration request, reads on claim 2) and protocol execution mechanism includes a mechanism for requesting the execution of said communication protocol sequence based on information that has been stored in said storage mechanism (Column 4 lines 53-56, where Simpson et al. disclose a subscriber validation code, reads on claim 3) and wherein said step of requesting to execute a communication protocol sequence includes requesting, by said external module to execute said communication protocol sequence based on information that is stored (Column 4 lines 53-56, where Simpson et al. disclose a subscriber validation code, reads on claim 11).

Consider claims 4 and 12, Simpson et al. in view of Rimpela disclose all the limitations as applied to claims 2 and 10 above and also disclose wherein said communication protocol sequence is a communication protocol sequence that is performed by radio between a mobile communication terminal and a base station (Column 4 lines 53-56, reads on claim 4) and wherein said step of executing a communication protocol sequence includes execution by said mobile communication terminal of a communication protocol sequence by radio with a base station (Column 4 lines 53-56, reads on claim 12).

Consider claims 5 and 13, Simpson et al. in view of Rimpela disclose all the limitations as applied to claims 1 and 10 above and also disclose stored information

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processing mechanism (microprocessor) for processing information that has been stored in said storage mechanism (Column 4 lines 49-56, reads on claim 5) and processing information that is stored in said external module (Column 4 lines 49-56, reads on claim 13).

Consider claims 6 and 14, Simpson et al. in view of Rimpela disclose all the limitations as applied to claims 5 and 13 above and also disclose wherein said protocol execution mechanism includes a mechanism for requesting the execution of a communication protocol sequence (registration) based on information (subscriber validation code) that has been processed by said stored information processing means (Column 4 lines 53-57, reads on claim 6) and wherein said step of executing a communication protocol sequence includes requesting, by said external module, execution of a communication protocol sequence (registration) based on information (subscriber validation code) that has been processed (Column 4 lines 53-57, reads on claim 14).

Consider claims 7 and 15, Simpson et al. in view of Rimpela disclose all the limitations as applied to claims 1 and 10 above and also disclose wherein said external module is any one of a SIM card (smart card), a USIM card, and an IC card having higher specifications than a SIM card or USIM card (Abstract, reads on claims 7 and 15).

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Consider claim 16, Simpson et al. disclose an external module for installation in a mobile communication terminal (Abstract, column 4 lines 49-52), said external module comprising;

a test program execution unit for performing test programs (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4, where Simpson et al. disclose enhancing a service card);

a collection mechanism for communicating with said mobile communication terminal to collect information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2) and

a storage mechanism for storing therein information that has been collected by said collection mechanism (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not disclose collecting during execution of test programs on said test program execution unit. Rimpela et al. disclose collecting during execution of test programs on said test program execution unit (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collect information during execution of test programs on the test program execution unit, as taught by Rimpela et al., in the method of Simpson et al. for the purpose determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Simpson also lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claim 17, Simpson et al. disclose a mobile communication terminal in which an external module for executing test programs is installed (Abstract, column 4 lines 49-52), said mobile terminal comprising:

an acquisition mechanism for acquiring information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state)); and

an output mechanism for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122).

However, Simpson et al. do not specifically disclose acquiring during said test programs. Rimpela et al. disclose acquiring information during the test programs (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line

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12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to acquire information during the test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Simpson also lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claim 18, Simpson et al. disclose a mobile communication system comprising

a mobile communication terminal; and

an external module for installation in said mobile communication terminal

(Abstract, column 4 lines 49-52);

wherein said mobile communication terminal comprises:

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an acquisition mechanism for acquiring information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state)); and

an output mechanism for supplying information that has been acquired by said acquisition mechanism to said external module (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 122);

and wherein said external module comprises:

a test program execution unit for performing test programs (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4);

a collection mechanism for collecting information that has been supplied by said output mechanism of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2); and

a storage mechanism for storing therein information that has been collected by said collection means (Column 6 lines 48-68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not specifically disclose collecting information for test programs on said test program execution unit. Rimpela et al. disclose collecting information for test programs on said test program execution unit (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collecting information for test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose

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determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al. in column 5 lines 33-45).

Simpson also lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Consider claim 19, Simpson et al. disclose a method for testing communication protocol by executing test programs in a mobile communication terminal (Column 1 lines 16-30, column 2 lines 65-68, column 3 lines 1-4), an external module being installed in said mobile communication terminal (Abstract, column 4 lines 49-52), said method comprising steps of:

requesting said mobile communication terminal, by said external module, to execute a communication protocol sequence (Column 4 lines 53- 57);

executing, by said mobile communication terminal, said communication protocol sequence in accordance with said request by said external module (Column 4 lines 53- 57);

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acquiring, by said mobile communication terminal, information relating to the internal state of said mobile communication terminal (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state));

supplying, by said mobile communication terminal, the acquired information to said external module (Column 6 lines 48-68, column 7 lines 1-2, where Simpson et al. disclose customizing the operation (information relating to the internal state) and this information is stored on the SIM card);

collecting, by said external module, information that has been supplied by said mobile communication terminal as part of said test program (Column 6 lines 48-68, column 7 lines 1-2); and

storing, in said external module, the collected information from said test program (Column 6 lines 48- 68, column 7 lines 1-2, figure 3 element 132).

However, Simpson et al. do not specifically disclose collecting information for test programs. Rimpela et al. disclose collecting information for test programs (Abstract, column 6 lines 26-36, column 8 lines 53-63, column 10 line 46-column 11 line 12, where Rimpela et al. disclose running tests on a control block). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to collecting information for test programs, as taught by Rimpela et al., in the method of Simpson et al. for the purpose determining and controlling delays, data to be transmitted and desired functions of the mobile station (as suggested by Rimpela et al in column 5, lines 33-45).

Simpson also lacks a teaching of the information relating to the internal state representing the communication network protocol of the mobile. Rimpela teaches acquiring information relating to the communication protocol of a mobile (Rimpela see especially column 2, lines 5-15). Note that Rimpela teaches that knowledge of the mobile communication protocol is necessary to ensure that proper function (Rimpela see especially column 2, lines 35-48). Therefore it would have been obvious to one of ordinary skill in the art to modify Simpson to acquire information regarding the mobile communication protocol in order to ensure proper functioning as taught by Rimpela.

Response to Amendment

4. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached Monday through Friday from 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4711.

6. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX

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number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Phil J. Sobutka", with a stylized, cursive script.

PHILIP J. SOBUTKA
PATENT EXAMINER

Philip J Sobutka

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